

Glen Lake Irrigation District Rolling Hills Section of the Main Canal Rehabilitation Project

The Main Canal of the Glen Lake Irrigation District's (GLID) irrigation system is the only canal that transports water to all turnouts and lateral headgates. This puts a tremendous amount of emphasis on GLID to maintain and operate this canal. The canal delivers water to 3,345 acres of crops, and more importantly, 3,323 acres are downstream of the project area. The GLID has had multiple engineering assessments completed for their existing irrigation system that include seepage studies. The most recent study, completed in 2012, identified the most critical project to undertake was to rehabilitate the Rolling Hills Section of the Main Canal. Seepage calculations performed for this reach of the canal show that a minimum of 134.2 million gallons of water per year could be conserved with the implementation of seepage abatement measures. Additionally, 8 acres of farmland adjacent to the project area have become unproductive due to seepage caused soil salinity. Implementation of seepage abatement measures to the Rolling Hills Section will allow GLID to reduce the amount of water diverted from Grave Creek each irrigation season. A minimum of 134.2 million gallons of water each year will remain in Grave Creek and eventually the Tobacco River for fish and wildlife benefits.

The proposed project is a critical step toward the conservation, management, development, and preservation of land and water resources within the GLID. In addition, annual revenue generated from improved crop yields could increase by approximately \$503,250 by alleviating seepage from the canal. In return, the local economy would benefit from the additional revenue.

The installation of canal liner through the Rolling Hills Section of the Main Canal will provide the following benefits:

- Reduced seepage
- Increased water delivery efficiency
- Water conservation of approximately 134.2 million gallons of water per year
- Increased on-farm irrigation efficiency
- Increased crop production
- Improved soil quality
- Preserve and revive the agricultural production on the acres adjacent to the project area affected by seepage caused oversaturation/soil salinity
- Conservation of water for recreation, fish, waterfowl, and wildlife habitat
- Improved local and state tax base
- Preservation of agricultural lifestyle

Grant Request Amount: \$100,000.00

GLID Match Amount: \$13,250.00

Estimated Total Project Cost: \$113,250.00

GLID sincerely appreciates your consideration of this project and hopes that you will find it as important and necessary as our residents and your constituents have.

